

VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION



Date 7/14/08

Contract ID 080425-303
County Audrain and Pike Route 54
Contractor Pace Construction Company
Designed By Pace Construction Company
VECP # VECP 08-66

Job No. J3P0664, J3P0727, J3P0733
Original Bid Cost \$4,596,400.00
By Aaron Loehr
Phone 314-524-7223
VECP ☐ or VECPP/PDU ☐

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages

The existing plans call for a 1/2" wedge of BP-3 to be applied to the 24' driving surface on J3P0727 and J3P0733. Pace Construction proposes to mill 1" or 1 3/4" depth across the driving surface. This will be a mill and fill operation. Pace Construction submitted a price for both depths at Modot's request in case stripping becomes an issue. The main advantages of milling across the driving surface instead of wedging would be significant cost reduction. This would also lower the amount of Type 5 Aggregate applied to the shoulder. This would be a 25/75 savings to the state. Please see attached spreadsheet.

2. Estimate of reduction in construction costs. \$69,552.99

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

Pace Construction does not see any long term effects on maintenance or operations.

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

7/18/08

(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

7/15/08

(date)

Scheduling for completion of the project

(effect)

6. Dates of any previous or concurrent submission of the same proposal.

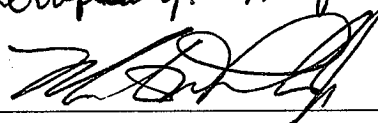
(date and/or dates)

Additional Comments:

The savings could possibly be greater to Modot as the BP-3 Wedge is expected to over run significantly because of the severe rutting on the route. The amount of over run can't be quantified but is believed to be over 10%.

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments: I have checked with Brandon Simmons in JC and he is ok with doing a mill and fill operation. I believe we should go with the 1" mill option. The contractor was doing the 1" operation today and it seems to be working terrifically. Therefore, I recommend approval of the 1" mill and fill option.



Submitted By Resident Engineer

7/23/08

Date

Comments: Agree with PE's comments. This should be a good way to achieve our expectations of smooth road with no joint bumps as well as cost savings due to possibility of large overruns on high priced BP-3 mix.

☒ Approval
Recommended

☐ Rejection
Recommended



District Engineer

7/30/08

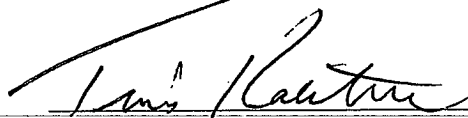
Date

Comments:

Concur with District - need to notify contractor that no joint bumps will be allowed.

☒ Approval

☐ Rejection



State Construction and Materials Engineer

8/15/08

Date

Distribution: Resident Engineer, Project Manager, District Operations Engineer, State Construction and Materials Engineer
*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102



PACE CONSTRUCTION COMPANY

Cost Savings to Profile Mill 1" J3P0727 and J3P0733

J3P0727					Index	Indexed	
Description	Qty	Unit	Unit Cost	Oil Content	Adjustment	Price	Total Price
BP-3(64-22)	3004.9	Ton	\$64.45	6.30%	\$8.95	\$73.40	\$220,548.88
Profile Mill 1"	110022	SY	\$1.78			\$1.78	\$195,839.16
Savings							\$24,709.72
Pace 25%							\$6,177.43
Modot Savings							\$18,532.29

J3P0733					Index	Indexed	
Description	Qty	Unit	Unit Cost	Oil Content	Adjustment	Price	Total Price
BP-3(64-22)	2096.3	Ton	\$61.50	6.30%	\$8.95	\$70.45	\$147,676.82
Profile Mill 1"	76173	SY	\$1.35			\$1.35	\$102,833.55
Savings							\$44,843.27
Pace 25%							\$11,210.82
Modot Savings							\$33,632.45

Total Savings	\$69,552.99
Pace 25%	\$17,388.25
Modot Savings	\$52,164.74

**Total Savings on Job J3P0733 would be based on index in August as originally planned on the schedule



PACE CONSTRUCTION COMPANY

Cost Savings to Profile Mill 1 3/4" J3P0727 and J3P0733

J3P0727					Index	Indexed	
Description	Qty	Unit	Unit Cost	Oil Content	Adjustment	Price	Total Price
BP-3(64-22)	3004.9	Ton	\$64.45	6.30%	\$8.95	\$73.40	\$220,548.88
Profile Mill 1 3/4"	110022	SY	\$1.98			\$1.98	\$217,843.56
Savings							\$2,705.32
Pace 25%							\$676.33
Modot Savings							\$2,028.99

J3P0733					Index	Indexed	
Description	Qty	Unit	Unit Cost	Oil Content	Adjustment	Price	Total Price
BP-3(64-22)	2096.3	Ton	\$61.50	6.30%	\$8.95	\$70.45	\$147,676.82
Profile Mill 1 3/4"	76173	SY	\$1.55			\$1.55	\$118,068.15
Savings							\$29,608.67
Pace 25%							\$7,402.17
Modot Savings							\$22,206.50

Total Savings	\$32,313.99
Pace 25%	\$8,078.50
Modot Savings	\$24,235.49

**Total Savings on Job J3P0733 would be based on index in August as originally planned on the schedi



MEMORANDUM

Missouri Department of Transportation
Construction and Materials
1617 Missouri Boulevard

TO: Travis Koestner – CM
Assistant State Construction and Materials Engineer

FROM: Denis Glascock

DATE: July 31, 2008

SUBJECT: Value Engineering Proposal

Attached is a value-engineering proposal from D3. I have reviewed it and I think it should be approved. If you do not concur, please advise. Otherwise route it accordingly for signature and processing.

Thanks.

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- ☐ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's, ect.)
- ☐ TCP/MOT
- ☒ Paving (PCCP, ect.)
- ☐ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc. _____

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

This involves 1" milling and inlay hot mix asphalt, instead of placement of ½" wedge that was designated by the contract. The process also reduces the amount of shoulder work required.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.
